

## WHAT IS ENVIRONMENTALLY- BENEFICIAL LANDSCAPING?

Environmentally-beneficial landscaping is a sustainable land management technique that is cost effective, environmentally-sound and reduces adverse impacts to the natural environment.

## ENVIRONMENTALLY- BENEFICIAL LANDSCAPING FOR FEDERAL FACILITIES

On April 22, 2000, Executive Order 13148, "Greening the Government Through Leadership in Environmental Management," was signed directing federal agencies to, at a minimum:

- institute acquisition and procurement practices that conform to the guidelines and policies for *Environmentally Beneficial Landscape Practices on Federal Landscaped Grounds (60 Fed. Reg. 40837)*, developed by the Office of the Federal Environmental Executive.
- purchase environmentally-preferable and recycled-content landscaping products; and
- encourage nonfederal grant recipients to implement environmental landscaping practices.

## ENVIRONMENTALLY- BENEFICIAL LANDSCAPING SAVES MONEY

- A New York State nine-hole golf course used organic-based fertilizers, sterile inhibitors and the least toxic synthetic pesticide to maintain their lawn. As a result, there was a 40 percent reduction in diseases on the greens and an annual savings of \$1,442.
- South Texas peanut farmers battling the wilt virus planted their crops later in the season than usual and lowered insecticide use to avoid killing too many naturally-occurring parasites. As a result, peanut yields increased 455 pounds per acre, insecticide use dropped 29 percent, and a net increase in returns of \$266 per acre was obtained.

- An Illinois university covered its landscaped flower beds and trees with mulch produced from the remnants of fallen limbs and leaves. While keeping the college's trees healthy, over 12.5 tons of yard trimmings and 82 tons of wood waste is reused in the university's landscape annually.
- In 1998, a national brewery composted over 200,000 tons of agricultural byproducts, 7,000 tons of beechwood chips, 2,350 tons of animal stable waste and 2,300 tons of yard waste. In total, this company's large-scale composting activities resulted in a savings of \$2.5 million.

## SIMPLE TIPS

- Reduce pesticide use and control unwanted pests through integrated pest management by **introducing insects** that are beneficial to the land. For example, introduce ladybugs to feed on and limit populations of landscape pests.
- Decrease fertilizer use and waste by **creating a compost pile of organic wastes** (unbleached paper, woodchips, straw, foodscraps, coffee grinds, etc). During composting, organic wastes are collected into a pile, left to aerate and decompose for a time, and then introduced into the soil to increase nutrients.
- Conserve water by **mulching**, whenever possible. Mulching is the placement of organic matter over the root zone of plants and trees. This **conserves** water by reducing moisture evaporation from the soil and weed populations. For example, leave grass clippings on the lawn after mowing as fertilizer, or till mulch into the flower beds to help prevent erosion over the winter.
- Save water by selecting trees, shrubs and ground covers that are indigenous to your region's soil.
- Irrigate the landscape effectively by watering plants deeply, infrequently and slowly. Excess irrigation not only wastes water, but can leach nutrients away from plant roots and increase the chances of polluting ground water.



## RESOURCES

The following are pamphlets and websites that should be considered when deciding which environmentally-beneficial landscaping practices are right for your landscaping needs.

### Office of the Federal Environmental Executive

Its mission is to advocate, coordinate and assist the environmental efforts of the federal community in waste prevention, recycling and the acquisition of recycled and environmentally-preferable products and services. [www.ofee.gov](http://www.ofee.gov).

### 2000 Buy-Recycled Series: Landscaping Products

This fact sheet is one of eight developed by EPA's Comprehensive Procurement Guideline Program, which helps federal agencies "close the loop" by buying recycled products. [www.epa.gov/cpg/pdf/lands-00.pdf](http://www.epa.gov/cpg/pdf/lands-00.pdf).

### Green Landscaping with Native Plants

This EPA website provides landscaping fact sheets, tips, case studies at corporations and universities, and a toolkit for local governments for using and promoting the growth of indigenous plants in a variety of ecosystems. [www.epa.gov/glnpo/greenacres/](http://www.epa.gov/glnpo/greenacres/).

### Landscaping for Energy Efficiency

This Department of Energy website provides landscaping design tactics and tips for cost-effective ways to lower heating and cooling costs while increasing esthetic improvements to your land. [www.eren.doe.gov/erec/factsheets/landscape.html](http://www.eren.doe.gov/erec/factsheets/landscape.html).

### Purdue Landscape and Nursery Thesaurus

This comprehensive website from Purdue University provides information from over 3,300 sources detailing everything from disease and insect problems, storm damage, irrigation and water quality, landscape maintenance to environmental disorders. [bluestem.hort.purdue.edu/plant/](http://bluestem.hort.purdue.edu/plant/).

### Water Efficient Landscape Planner

In conjunction with Purdue University, this software was developed by EPA to explain the advantages and principles of water efficient landscaping. The software details the basics of landscape planning and provides suggestions to help users select the most appropriate plants for their needs. [www.epa.gov/seahome/landscp.html](http://www.epa.gov/seahome/landscp.html).

### Green Communities Beneficial Landscaping

This Region 3 EPA website provides facts, links and studies concerning environmentally-beneficial landscaping and its importance for local ecosystems. [www.epa.gov/region03/greenkit/landscap.htm](http://www.epa.gov/region03/greenkit/landscap.htm).

### City Farmer

This comprehensive website provides articles, studies and techniques for composting, mulching and reducing solid waste. Other subjects include: landscape planning, introducing beneficial insects and efficient water use. [www.cityfarmer.org](http://www.cityfarmer.org).

### United States Composting Council

This organization is involved in research, public education, composting and composting standards, expansion of compost markets, and gaining public support for composting. Phone: 440-989-2748. Or visit: [www.compostingcouncil.org](http://www.compostingcouncil.org).

### The Compost Resource Page

This website is a hub of information on composting. It provides a list of links to composting resources on the Internet [www.oldgrowth.org/compost](http://www.oldgrowth.org/compost).

### United States Department of Agriculture's National Integrated Pest Management Network

This website contains landscape and household pest management information, including a calendar of integrated pest management events; contact information for pest management experts; information organization by pest, state/region, commodity and control tactics; publications; links to pest-related databases; and web-based integrated pest management tools. [www.reeusda.gov/nipmn](http://www.reeusda.gov/nipmn).

### Integrated Pest Management Almanac

This website provides extensive integrated pest management tools and information. It features the newsletter, *IPM Solutions*, tip sheets, integrated pest management plans and various checklists for your landscaping needs. [www.ipmalmanac.com](http://www.ipmalmanac.com).

### The Northeast Recycling Council

This organization established EPPNet, (Environmentally Preferable Products Procurement Listserv), for federal state, local, private procurement, and environmental officials charged with purchasing environmentally-preferable products. The EPPNet provides quick access to information such as, availability of product specifications, vendors, pricing information and strategies to achieve environmental

procurement goals. New members must register to gain access. [www.nerc.org/eppnet.html](http://www.nerc.org/eppnet.html).



## QUESTIONS?

For general inquiries concerning environmentally-beneficial landscaping call or e-mail Diane Buxbaum, pollution prevention coordinator for federal facilities:

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## FOR MORE INFORMATION

Visit EPA Region 2's Pollution Prevention Website at: <http://www.epa.gov/region02/p2>



# Environmentally Beneficial Landscaping



*Learning to  
Balance our Needs  
with those of Nature*